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OM nucleic - nucleic search, using sw model

Run on: September 12, 2002, 09:41:26 : Search time 99.3 Seconds
(without alignments)
4435.256 Million cell updates/sec

Title: US-09-719-017a-2
Perfect score: 1793
Sequence: 1 gattccctcggtgacacatca.....caattactcaatgcgcgcg 1793

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2/1na/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/1na/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/1na/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/1na/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/1na/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/1na/Backfile1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	404	22.5	5096	1 US-08-106-433A-3	Sequence 3, Appli
2	404	22.5	5110	1 US-08-106-433A-4	Sequence 4, Appli
3	404	22.5	5110	1 US-08-106-433A-5	Sequence 5, Appli
4	404	22.5	5110	1 US-08-106-433A-6	Sequence 6, Appli
5	404	22.5	5110	1 US-08-106-433A-7	Sequence 7, Appli
6	404	22.5	5110	1 US-08-106-433A-8	Sequence 8, Appli
7	404	22.5	5110	1 US-08-106-433A-9	Sequence 9, Appli
8	404	22.5	5110	1 US-08-106-433A-10	Sequence 10, Appli
9	404	22.5	5110	1 US-08-106-433A-11	Sequence 11, Appli
10	404	22.5	5110	1 US-08-106-433A-12	Sequence 12, Appli
11	404	22.5	5110	1 US-08-106-433A-13	Sequence 13, Appli
12	404	22.5	5110	1 US-08-106-433A-14	Sequence 14, Appli
13	404	22.5	5110	1 US-08-106-433A-15	Sequence 15, Appli
14	332.8	18.6	4476	3 US-08-801-344-2	Sequence 2, Appli
15	332.8	18.6	4476	4 US-09-498-599-2	Sequence 2, Appli
16	332.8	18.6	4593	4 US-08-801-344-1	Sequence 1, Appli
17	332.8	18.6	4593	4 US-09-498-599-1	Sequence 1, Appli
18	332.8	18.6	7475	2 US-08-971-036-1	Sequence 1, Appli
19	332.8	18.6	7475	2 US-09-096-570-1	Sequence 1, Appli
20	328.6	18.3	1097	3 US-08-761-258-7	Sequence 7, Appli
21	328.6	18.3	1097	2 US-08-977-306-7	Sequence 7, Appli
22	328.6	18.3	3301	2 US-08-447-430A-42	Sequence 42, Appli
23	328.6	18.3	3423	2 US-08-447-430A-40	Sequence 40, Appli
24	328.6	18.3	3423	4 US-09-485-737B-86	Sequence 86, Appli
25	328.6	18.3	3474	4 US-08-447-430A-41	Sequence 41, Appli
26	328.6	18.3	3474	2 US-08-318-837-10	Sequence 10, Appli
27	328.6	18.3	4009	2 US-08-500-860A-2	Sequence 2, Appli

ALIGNMENTS

28	328.6	18.3	5238	6	5453363-1	Patent No. 5453363
29	328.6	18.3	6312	1	US-08-531-601-3	Sequence 3, Appli
30	328.6	18.3	6312	2	US-08-859-032-3	Sequence 3, Appli
31	328.6	18.3	8430	4	US-09-131-028A-6	Sequence 6, Appli
32	328.6	18.3	8430	4	US-09-131-028A-10	Sequence 10, Appli
33	290.8	16.2	4296	5	US-08-316-950-15	Sequence 15, Appli
34	290.8	16.2	4296	5	PCT-US95-12642-15	Sequence 15, Appli
35	290.8	16.2	4352	1	US-08-316-950-16	Sequence 16, Appli
36	290.8	16.2	4352	5	PCT-US95-12642-16	Sequence 16, Appli
37	290.8	16.2	6047	1	US-08-316-950-12	Sequence 12, Appli
38	290.8	16.2	6047	5	PCT-US95-12642-12	Sequence 12, Appli
39	267.4	14.9	1035	2	US-08-690-493-2	Sequence 2, Appli
40	267.4	14.9	1200	2	US-08-690-493-3	Sequence 3, Appli
41	225.2	12.6	665	4	US-09-214-214A-12	Sequence 12, Appli
42	225.2	12.6	665	4	US-09-255-953-9	Sequence 9, Appli
43	222.4	12.4	469	2	US-08-647-368A-1	Sequence 1, Appli
44	213.2	11.9	663	4	US-09-214-214A-11	Sequence 11, Appli
45	213.2	11.9	663	4	US-09-255-953-8	Sequence 8, Appli

RESULT 1
: Sequence 3, Application US/08106433A
: Patent No. 5385834
: GENERAL INFORMATION:
: APPLICANT: Richard A. Ikeda
: TITLE OF INVENTION: Mutant T7 RNA Polymerase GPl(Lys222)
: TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
: NUMBER OF SEQUENCES: 23
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Deveau, Colton, and Marguis
: STREET: Two Midtown Plaza, Suite 1400,
: STREET: 1360 Peachtree St., NE
: CITY: Atlanta
: STATE: Georgia
: COUNTRY: USA
: ZIP: 30309
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage
: COMPUTER: Apple Macintosh
: OPERATING SYSTEM: Macintosh 7.1
: SOFTWARE: Microsoft Word 5.1
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/106,433A
: FILING DATE: 08/13/93
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: No. 5385834 Applicable
: FILING DATE: No. 5385834 Applicable
: ATTORNEY/AGENT INFORMATION:
: NAME: Deveau, Colton, and Marguis
: NAME: Colton, Laurence P.
: REGISTRATION NUMBER: Reg. No. 5385834 33, 371
: REFERENCE/DOCKET NUMBER: 10733-161
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 404-875-8817
: TELEFAX: 404-875-8505
: INFORMATION FOR SEQ ID NO: 3:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 5096 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: circular
: MOLECULE TYPE: other nucleic acid
: HYPOTHETICAL: NO
: ANTI-SENSE: NO
: FRAGMENT TYPE: NO. 5385834 applicable
: ORIGINAL SOURCE:
: ORGANISM: No. 5385834 applicable
: STRAIN: No. 5385834 applicable

AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
JOURNAL: Biochemistry
VOLUME: 32
ISSUE: 35
PAGES: 9115-9124
DATE: Sept. 7, 1993
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
US-08-106-433A-4

Query Match 22.5%; Score 404; DB 1; Length 5110;
Best Local Similarity 96.5%; Pred. No. 8.9e-91;
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Qy 1327 tgaacggccgtaagcggcgaatgtagtgggtctcccatgagcgaagtaaggaaatgcc 1386
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Qy 1387 aggcatacaataaagcaagctcagtcgaagacatggccttccttctctgt 1446
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Qy 1567 aagcaagggccatcctgacgatggcctttgcttctacaactctctctgtc 1626
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Qy 1627 atatctacaagccatccccccacagatacgtaaacatagcctcgttttgcacagaaa 1686
Db 1611 ATATCTACAAGCCATCCCCCAGATACGTAACATGACCTCGTTTTCATCAGGAAA 1670
Qy 1687 ggaactat 1694
Db 1671 GCAGCTGT 1678

RESULT 3

US-08-106-433A-5
Sequence 5, Application US/08106433A
Patent No. 5385834

GENERAL INFORMATION:
APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:

ADDRESSEE: Deveau, Colton, and Marquis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
ZIP: 30309

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106.433A
FILING DATE: 08/13/93
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marquis
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-875-8817
TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: No
ANTI-SENSE: No
FRAGMENT TYPE: No. 5385834 applicable
ORIGINAL SOURCE:
ORGANISM: No. 5385834 applicable
STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: pCAT10-1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
FEATURE:
NAME/KEY: T7 promoter f10 located between nucleotides
NAME/KEY: 198 and 220 and in front of a promoterless
NAME/KEY: chloramphenicol acetyl transferase (CAT) gene.
LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from
IDENTIFICATION METHOD: PKK232-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: The T7 promoter between positions 198 and 220 is recogn
PUBLICATION INFORMATION:
AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
JOURNAL: Biochemistry
VOLUME: 32
ISSUE: 35
PAGES: 9115-9124
DATE: Sept. 7, 1993
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
US-08-106-433A-5

Sequence 8, Application US/08106433A
Patent No. 5385834
GENERAL INFORMATION:
APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA Polymerase Gp1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, and Marguis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
ZIP: 30309
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: McIntosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106,433A
FILING DATE: 08/13/93
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marguis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-875-8817
TELEFAX: 404-875-8505
INFORMATION FOR SEQ. ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: NO. 5385834 applicable
ORIGINAL SOURCE:
ORGANISM: NO. 5385834 applicable
STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
ORGANELLE: NO. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: PCM-T270
POSITION IN GENOME:
CHROMOSOME/SEGMENT: NO. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
FEATURE:
NAME/KEY: Inactive T7 f10 promoter mutant (-9C to A) located between nucle
LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from
IDENTIFICATION METHOD: pKK23-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
PUBLICATION INFORMATION:
AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
JOURNAL: Biochemistry

VOLUME: 32
ISSUE: 35
PAGES: 9115-9124
DATE: Sept. 7, 1993
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
US-08-106-433A-8
Query Match 22.5%; Score 404; DB 1; Length 5110;
Best Local Similarity 96.5%; Pred. No. 8.9e-91;
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;
QY 1267 agagtcgacctgcagcagctgaagcttggtccacctgacccatgcggaactgaag 1326
DB 1251 AGAATTTGCTGGGGGAGTAGCGCGGTGCTCCACCTGACCCCATGCGCAACTCAGAG 1310
QY 1327 tgaacgcgctagcgcgcgatgtagtgtagggtctcccatgcgagtagggaactgcc 1386
DB 1311 TGAACGCCGTAGCGCGGATGATGTGTGGGCTCTCCCATGCGAGATGAGCACTGCC 1370
QY 1387 aggcataaaataaacgaaagctcagtcgaaagactgagccttcgtttatctgtgt 1446
DB 1371 AGGCATCAATTAACGAAAGGCTCACTCGAAGACTGGGCTTTTATCTGTTGT 1430
QY 1447 ttgtcgttgaagctctcctcgtgtagaacaatccgcgcgagcggaattgaacgttgcc 1506
DB 1431 TTGTCGCTGAACCTCTCCCTGAGTAGGACAAATCCCGGGAGCGGATTTGAACGTTGCG 1490
QY 1507 aagcaacgcccgaaggtgagcgagcagcgcgcgcataaaactgcgaagcatcaat 1566
DB 1491 AAGCAACGCCCGGAGGAGGTGGCGGCGAGACGCCCGCATTAACCTGCAGCATCAATT 1550
QY 1567 aagcagaagccatcctcagagatgagccttttgcglttcaaaactcttcgtgtgc 1626
DB 1551 AAGCAGAAGCCATCCGATGAGATGGCTTTTGCGTTTACAAACTCTTCCTGTGCTC 1610
QY 1627 atattcagaagcattcccccacagatacgttaactagctgttttcacagaa 1686
DB 1611 ATATCTAAGCCATCCGCCACAGATAGCGTAACCTGCTTTTTCATCAGGAAA 1670
QY 1687 gcaagcat 1694
DB 1671 GCACTCT 1678
RESULT 7
US-08-106-433A-9
Sequence 9, Application US/08106433A
Patent No. 5385834
GENERAL INFORMATION:
APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA Polymerase Gp1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, and Marguis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
ZIP: 30309
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: McIntosh 7.1
SOFTWARE: Microsoft Word 5.1

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/106.433A
 FILING DATE: 08/13/93
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: No. 5385834 Applicable
 FILING DATE: No. 5385834 Applicable
 ATTORNEY/AGENT INFORMATION:
 NAME: Deveau, Colton, and Marquis
 NAME: Colton, Laurence P.
 REGISTRATION NUMBER: Reg. No. 5385834 33,371
 REFERENCE/DOCKET NUMBER: 10733-161
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 404-875-8817
 TELEFAX: 404-875-8505
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 5110 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: circular
 MOLECULE TYPE: other nucleic acid
 HYPOTHETICAL: NO
 ANTI-SENSE: NO
 FRAGMENT TYPE: No. 5385834 applicable
 ORIGINAL SOURCE:
 ORGANISM: No. 5385834 applicable
 STRAIN: No. 5385834 applicable
 INDIVIDUAL ISOLATE: No. 5385834 applicable
 DEVELOPMENTAL STAGE: No. 5385834 applicable
 HAPLOTYPE: No. 5385834 applicable
 TISSUE TYPE: No. 5385834 applicable
 CELL TYPE: No. 5385834 applicable
 ORGANELLE: No. 5385834 applicable
 IMMEDIATE SOURCE:
 LIBRARY: No. 5385834 applicable
 CLONE: pCM-P1087
 POSITION IN GENOME:
 CHROMOSOME/SEGMENT: No. 5385834 applicable
 MAP POSITION: No. 5385834 applicable
 UNITS: No. 5385834 applicable
 FEATURE:
 NAME/KEY: Inactive T7 f10 promoter mutant (-9C to T) located between nucle
 LOCATION: 198 to 220
 IDENTIFICATION METHOD: The clone was constructed from
 IDENTIFICATION METHOD: PKR232-8 and the inserted "promoter" was sequenced.
 OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
 PUBLICATION INFORMATION:
 AUTHORS: Ikeda, R.A., Chang, L.L., and Marhamana, G. S.
 TITLE: Selection and Characterization of a Mutant T7
 TITLE: RNA Polymerase that Recognizes an Expanded Range
 TITLE: of T7-like Promoters
 JOURNAL: Biochemistry
 VOLUME: 32
 ISSUE: 35
 PAGES: 9115-9124
 DATE: Sept. 7, 1993
 DOCUMENT NUMBER:
 FILING DATE:
 PUBLICATION DATE:
 RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
 US-08-106-433A-9

Query Match	22.5%	Score 404;	DB 1;	Length 5110;
Best Local Similarity	96.5%;	Pred. No. 8.9e-91;		
Matches 413;	Conservative 0;	Mismatches 15;	Indels 0;	Gaps 0;

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Db	1251	AGAAATTGGCTGGGGGCGATGACGGGGGTGGTGGCCAACTGACCCCATGGCCGAACCTCAGAA	1310
Qy	1327	tgaaacgcgcgtaagcgcgcgaatgtaigtgtggygtctccccatgagaaatgaagaaatcgc	1386
Db	1311	TGAACCCGCCCTAGAGCGCGATGATGATGTGGGGGTCTCCCATCGAGATAGGAACTGCC	1370
Qy	1387	agagcataaataaagaagaaggtctagtcgaaagacttggcgcttctcgtttatcgtgtg	1446
Db	1371	AGGCATCAATTAATAAACGAAGAGCTCATGAAAGATGGGCGCTTTGCTTTATCTGTTGT	1430
Qy	1447	tctgcgttgaaagcgtctcctcttgaatgaagacaatcgcgcgagagcgaattgaacgttgc	1506
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Qy	1507	aagcaacgycgccggaaggtgtgcgycgaggaagccgcataactgcagacatcaaat	1566
Db	1491	AAGCAACGGGCCCGAGGGGTGGCCGGCAGAGACGCCGCCCTAATAACCTGCACAGGATCAAAATT	1550
Qy	1567	aagcagaagaagccatcctgcgaacggaatggccttttgcgtttcttacaacacttcctcgtgc	1626
Db	1551	AAGCAGAGAGGCCATCTCGACGGATGGCCTTTTGGCTTTCTCAAAACTTTCCTGTGCTC	1610
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Db	1611	ATATCTCAAGCCATCCCCCCACAGATAGGTTAACTAGACCTCGTTTGTTCATCAGAAA	1670
Qy	1687	gcacgtat	1694
Db	1671	GCACCTGT	1678

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1  RESULT      8
2  US-08-106-433A-10
3  Sequence 10 Application US/08106433A
4  Patent No. 5385834
5  GENERAL INFORMATION:
6  APPLICANT: Richard A. Ikeda
7  TITLE OF INVENTION: Mutant T7 RNA Polymerase Gp1(Ty5222)
8  TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
9  NUMBER OF SEQUENCES: 23
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: Deveau, Colton, and Marguis
12 STREET: Two Midtown Plaza, Suite 1400,
13 STREET: 1360 Peachtree St., NE
14 CITY: Atlanta
15 STATE: Georgia
16 COUNTRY: USA
17 ZIP: 30309
18 COMPUTER READABLE FORM:
19 MEDIUM TYPE: Disquette, 3.50 inch, 1.4 MB Storage
20 COMPUTER: Apple Macintosh
21 OPERATING SYSTEM: McIntosh 7.1
22 SOFTWARE: Microsoft word 5.1
23 CURRENT APPLICATION DATA:
24 APPLICATION NUMBER: US/08/106,433A
25 FILING DATE: 08/13/93
26 CLASSIFICATION: 435
27 PRIOR APPLICATION DATA:
28 APPLICATION NUMBER: NO. 5385834 Applicable
29 FILING DATE: NO. 5385834 Applicable
30 ATTORNEY/AGENT INFORMATION:
31 NAME: Colton, Laurence P.
32 REGISTRATION NUMBER: Reg. NO. 5385834 33,371
33 REFERENCE/DOCKET NUMBER: 10733-161
34 TELECOMMUNICATION INFORMATION:
35 TELEPHONE: 404-875-8817
36 TELEFAX: 404-875-8505
37 INFORMATION FOR SEQ ID NO: 10:
38 SEQUENCE CHARACTERISTICS:
39 LENGTH: 5110 base pairs
40 TYPE: nucleic acid
41 STRANDEDNESS: double
42
43
44
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TOPOLOGY: circular
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: No
ANTI-SENSE: No
FRAGMENT TYPE: No. 5385834 applicable
ORIGINAL SOURCE: No. 5385834 applicable
ORGANISM: No. 5385834 applicable
STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE: No. 5385834 applicable
LIBRARY: No. 5385834 applicable
CLONE: No. 5385834 applicable
POSITION IN GENOME: No. 5385834 applicable
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
FEATURE:
NAME/KEY: Intermediate T7 f10 promoter mutant (-8T to G) located between n
LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from
IDENTIFICATION METHOD: pK232-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: The mutant T7 promoter between positions 198 and 220 is
PUBLICATION INFORMATION:
AUTHORS: Ikeda, R.A., Chang, L.L., and Marsham, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
JOURNAL: Biochemistry
VOLUME: 32
ISSUE: 35
PAGES: 9115-9124
DATE: Sept. 7, 1993
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
US-08-106-433A-10

Query Match 22.5%; Score 404; DB 1; Length 5110;
Best Local Similarity 96.5%; Pred.No.8.9e-91;
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgacgtgacgagcatgcaagcttggtccacatgacccatgacgaactcagaag 1326
1251 AGAATTGCTGGCGGAGAGCGCGGTGTCCACTGACCCCAATGCCAATCTCAGAG 1310
QY 1327 tgaacgcgtagcgccgagtagtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1386
1311 TGAACGCGGTAGCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1370
QY 1387 aggcataataaagaagaagctcagtcgaagaagcttggtgtgtgtgtgtgtgtgtgt 1446
1371 AGGCATCAATTAAGAAAGGCTCAGTCGAAAGACTGGGCTTTGATTATCTGTGT 1430
QY 1447 ttcggtgaacgctctcctcgaatagaacaacccgcgcgcgcgcgcgcgcgcgcgcgcgc 1506
1431 TTCTCGTGAACGCTCTCTCGAGTAGAGCAAAATCCCGCGGACGGATTGTAACGTTGCG 1490
QY 1507 aagcaacgc 1566
1491 AAGCAACGCGCGGAGGT 1550
QY 1567 aagcaaaagccatctctgacgagtagccttttggtgttttacaactcttctgtcgtc 1626

Db 1551 AAGCAGAGGCGATCCTGACGATGGCCCTTTTGGCTTCTTACAAACTCTCTGTCGT 1610
QY 1627 atattacaagccatcccccacagatacgttaactagctgttttgatcagaagaa 1686
Db 1611 ATATCTACAGGCGATCCCGCCACAGATACGGTAACAGCTGTGTTTGCATCAGGAA 1670
QY 1687 gcagcat 1694
Db 1671 GCAGCTCT 1678

RESULT 9
US-08-106-433A-11
Sequence 11, Application US/08106433A
Patent No. 5385834
GENERAL INFORMATION:
APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, and Marquis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
ZIP: 30309
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106,433A
FILING DATE: 08/13/93
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marquis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-875-8817
TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: No
ANTI-SENSE: No
FRAGMENT TYPE: No. 5385834 applicable
ORIGINAL SOURCE:
ORGANISM: No. 5385834 applicable
STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: No. 5385834 applicable
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable

; DOCUMENT NUMBER: .
 ; FILING DATE:
 ; PUBLICATION DATE:
 ; RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
 ;
 US-08-106-433A-12

Query Match	22.5%;	Score 404;	DB 1;	Length 5110;
Best Local Similarity	96.5%;	Pred. NO. 8.9e-91;		
Matches 413; Conservative	0;	Mismatches 15;	Indels 0;	Gaps 0;

QY	1267	aaagtcgaactcgagagcatgcaagcttgggtctccaccctgaaccatgcccgaactcagaag	1326
Db	1251	AGAAATTGGCTGTGGCGGCAGTACGCCGGTGGTCCACCTACCCCATCCGAACTCAGAAAG	1310
QY	1327	tgaaacgcgctlagcgcgcgaatggtagtgtctgggtctctcccatgctgagagtaaggaaatgc	1386
Db	1311	TGAAMCCGCTAGCGCGAGTGGTAAGTGGGGGCTCCCATCGAAGTAGGAACCTCC	1370
QY	1387	aggaatcaaatataaaagaaagtgctcagtcgaaagacttgggccttcgtttatctcgtgtc	1446
Db	1371	AGGCATTAATATAAACCAAAAGGCTCAGTGTGAAAGACTGGGGCTTTTATCTGTTGT	1430
QY	1447	ctgtcgtg tgaacgcctctctctgtgaaagacaaatcgcgcggagcgagattgaaagcttgcg	1506
Db	1431	TTGTGGTGAACGCTCTCTCGAATAGACAAATCCGCGGGAGCGGATTTGAACCTTGC	1490
QY	1507	aagcaacgcgcccggaaggtgtgcgagcagaagccgcataaactgtccaagcatcaaat	1566
Db	1491	AAGCAACGCGCCCGAGGGGTGGCCGGCAGAGCGCCCTTAAACTGCCCAGGCATCAAAATT	1550
QY	1567	aagcagaagagccatctccgaagcgtatggcctttttggcttcttaacaactctccctgtgc	1626
Db	1551	AAGCAGAAGGCCATCTGACGGATGGCCTTTTGGCTTTCTCAAACTCTTCTCTGCTC	1610
QY	1627	ataatctcaagcatcccccacaagaatacgtataaactagcctcgtcttctgtcagagaa	1686
Db	1611	ATATCTCAAGACCATCCCCACACAGATAGGGTAACTAGCCTCGTTTGGATCAGGAA	1670
QY	1687	gcagactat	1694
Db	1671	GCACTGT	1678

RESULT 11
 US-08-106-433A-13
 Sequence 13 Application US/08106433A
 Patent No. 5385834
 GENERAL INFORMATION:
 APPLICANT: Richard A. Ikeda
 TITLE OF INVENTION: Mutant T7 RNA Polymerase GPl(Lys222)
 TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
 NUMBER OF SEQUENCES: 23
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Deveau, Colton, and Margulis
 STREET: Two Midtown Plaza, Suite 1400,
 STREET: 1360 Peachtree St., NE
 CITY: Atlanta
 STATE: Georgia
 COUNTRY: USA
 ZIP: 30309
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette, 3.50 Inch, 1.4 MB Storage
 COMPUTER: Apple Macintosh
 OPERATING SYSTEM: Macintosh 7.1
 SOFTWARE: Microsoft Word 5.1
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/106,433A
 FILING DATE: 08/13/93
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: NO. 5385834 Applicable
 FILING DATE: NO. 5385834 Applicable

ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marquis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,377
REFERENCE/DOCKET NUMBER: 10733-161
TELECOMMUNICATION INFORMATION:

INFORMATION FOR SEQ ID NO: 13:

LENGTH: 5110 base pairs

TYPE: nucleic acid
STRANDEDNESS: double

MOLECULE TYPE: other nucleic acid

HYPOTHETICAL: NO

FRAGMENT TYPE: NO. 5385834 applicable

ORGANISM: NO. 5385834 appl1cable

INDIVIDUAL ISOLATE: No. 5385834 applicable

DEVELOPMENTAL STAGE: NO. 5385834 applicable
HABITTYPE: NO. 5385834 applicable

TISSUE TYPE: NO. 5385834 applicable

ORGANELLE: NO. 5385834 applicable

LIBRARY: NO. 5385834 applicable

CLONE: pcm-p1208
POSITION IN GENOME:

CHROMOSOME/SEGMENT: NO. 5385834 appl

UNITS: No. 5385834 applicable

NAME/KEY: Inactive T7 f10 promoter mutant (-7C to G) located between nucle

IDENTIFICATION METHOD: The clone was constructed from

IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was sequenced. OTHER INFORMATION: The distance between positions 108 and 320

PUBLICATION INFORMATION:

TITLE: Selection and Characterization of a Mutant T7

TITLE: RNA polymerase that
of T7-like promoters

JOURNAL: Biochemistry
VOLUME: 33

ISSUE: 35

DATE: Sept. 7, 1993

DOCUMENT NUMBER:
FILING DATE:

PUBLICATION DATE:
DOCUMENT NUMBER:

FILING DATE:

RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110

05-06-106-433A-13

Query Match	22.5%;	Score 404;	DB 1;	Length 510;
Best Local Similarity	96.5%;	Pred. No. 8.9e-91;		
Matches 413;	Conservative	0;	Mismatches 15;	Indels 0;
			Gaps	0;

QY 1267 agagtcgaacctgcaagcatgcaagcttgggtccacctgaccccatgccgaactcagaag 1326

1251 AGAATTGCTGGCGGCTAGCGCGGTGTCCACCTGACCCATGCGGAATTGAGAAG 1310

1500

[illegible]

DB 1311 1GAAACGCCG1AGCGCCGAI6G1AG1G1GGG1C1CCCCA1GCGAGAG1AGGGAA1GCC 1310

QY 1387 aggcattcaataaaacgaaagctcagtcgaaagactggcccttcgttttatctgtgt 1446

|||||
Db 1371 AGGATCAATAAAGAAAGGCTCAGTCAAGACTGGCCCTTCGTTTATCTGTGT 1430
Qy 1447 ttgtcgtgtgaacgtctctctctgaagtaagacaatcccgaggagagatttaacgttcg 1506
Db 1431 TTGTGGTGAACGCTCTCTTAAGTAGAGCAAAATCCCGGGAGCGGATTTAAAGCTTCG 1490
Qy 1507 aagcaagcgcccgaggaggtgtgcggcggaagcgcgcgcataactgcagcatcaatt 1566
Db 1491 AAGCAAGCGCCCGAGAGGTGTGGCGGAGAGAGCCCGCATTAAGTCCAGGATCAAAAT 1550
Qy 1567 aagcaagagccatcctgaagatgagccttttgcttctacaactctctctgtcgc 1626
Db 1551 AAGCAGAAGCGCATCTGACGCGATGCGCTTTTGTGCTTTCTACAAACTCTCTCTGTC 1610
Qy 1627 atattcaagcatcccccacagataagtaactagctctgttttgatacagaagaa 1686
Db 1611 ATATCTCAAGCCATCCCGCCACAGATAGGTAAGCTGTTTGTGATCAGGAAA 1670
Qy 1687 gcaagcat 1694
Db 1671 GCAGCTGT 1678
RESULT 12
US-08-106-433A-14
: Sequence 14, Application US/08106433A
: Patent No. 5385834
: GENERAL INFORMATION:
: APPLICANT: Richard A. Ikeda
: TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)
: TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
: NUMBER OF SEQUENCES: 23
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Deveau, Colton, and Marquis
: STREET: Two Midtown Plaza, Suite 1400,
: STREET: 1360 Peachtree St., NE
: CITY: Atlanta
: STATE: Georgia
: COUNTRY: USA
: ZIP: 30309
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette, 3.50 Inch, 1.4 MB Storage
: COMPUTER: Apple Macintosh
: OPERATING SYSTEM: McIntosh 7.1
: SOFTWARE: Microsoft Word 5.1
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/106,433A
: FILING DATE: 08/13/93
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: No. 5385834 Applicable
: FILING DATE: No. 5385834 Applicable
: ATTORNEY/AGENT INFORMATION:
: NAME: Deveau, Colton, and Marquis
: NAME: Colton, Laurence P.
: REGISTRATION NUMBER: Reg. No. 5385834 33,371
: TELEPHONE: 404-875-8817
: TELEFAX: 404-875-8505
: INFORMATION FOR SEQ ID NO: 14:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 5110 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: circular
: MOLECULE TYPE: other nucleic acid
: HYPOTHEICAL: NO
: ANTI-SENSE: NO
: FRAGMENT TYPE: No. 5385834 applicable
: ORIGINAL SOURCE:
: ORGANISM: No. 5385834 applicable

STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: pCM-P1031
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
FEATURE:
NAME/KEY: Inactive T7 f10 promoter mutant (-7C to A) located between nucle
LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from
IDENTIFICATION METHOD: PKR32-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
PUBLICATION INFORMATION:
AUTHORS: Ikeda, R.A., Chang, L.L., and Marshamane, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
JOURNAL: Biochemistry
VOLUME: 32
ISSUE: 35
PAGES: 9115-9124
DATE: Sept. 7, 1993
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110
US-08-106-433A-14
Query Match 22.5%; Score 404; DB 1; Length 5110;
Best Local Similarity 96.5%; Pred. No. 8.9e-91;
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;
Qy 1267 agagcgacccgcaagcatgcaagcttggtccaccctgaccatcgccaggaactagaag 1326
Db 1251 AGAATTGCTGGCGGCGAGTACGCGGTGTCACCTGACCCCTGCGAAGCTCAGAG 1310
Qy 1327 tgaacgcccgtagcgcgcagtagtggtggtgtctcccatgcaagtaggaactgcc 1386
Db 1311 TGAACGCCGTAGCGCCGATGATGTGTGGGTCTCCCATGCGAGATAGGAACTGCC 1370
Qy 1387 aggcataaataaagaagagctcgaagaagactgagccttctgttatctgtgtc 1446
Db 1371 AGGATCAATAAAGAAAGGCTCAGTCGAAAGACTGGCCTTTCGTTTATCTGTGT 1430
Qy 1447 ttgtcgtgtgaacgtctctctctgaagtaagacaatcccgaggagagatttaacgttcg 1506
Db 1431 TTGTGGTGAACGCTCTCTTAAGTAGAGCAAAATCCCGGGAGCGGATTTAAAGCTTCG 1490
Qy 1507 aagcaagcgcccgaggaggtgtgcggcggaagcgcgcgcataactgcagcatcaatt 1566
Db 1491 AAGCAAGCGCCCGAGAGGTGTGGCGGAGAGAGCCCGCATTAAGTCCAGGATCAAAAT 1550
Qy 1567 aagcaagagccatcctgaagatgagccttttgcttctacaactctctctgtcgc 1626
Db 1551 AAGCAGAAGCGCATCTGACGCGATGCGCTTTTGTGCTTTCTACAAACTCTCTCTGTC 1610
Qy 1627 atattcaagcatcccccacagataagtaactagctctgttttgatacagaagaa 1686
Db 1611 ATATCTCAAGCCATCCCGCCACAGATAGGTAAGCTGTTTGTGATCAGGAAA 1670
Qy 1687 gcaagcat 1694

Job time: 157 sec
